

Patent claims

1. Active-ingredient-containing formulation ~~withcomprising~~ a plurality of active-ingredient-containing phases ~~which is characterized in that~~wherein the
5 formulation ~~has~~comprises a first innermost finely divided phase (I) which consists of active ingredient or active ingredient solution, ~~of which preferably~~
wherein at least some phase particles optionally are surrounded with a barrier mantle (M), and that the formulation has a second, middle phase (II) which serves as dispersant for the first, inner phase (I) and in which active
10 ingredient may likewise be dissolved, and ~~that the formulation has a third outer phase (III) which serves as dispersant for the second middle phase and in which active ingredient may in turn be present in dissolved form and/or in the form of solid particles, which again may be~~optionally are surrounded with a barrier mantle.
- 15 2. Formulation according to Claim 1, ~~characterized in that~~wherein the intermediate phase (II) ~~when applying the formulation to a surface acts as mechanical stabilization of the innermost phase (I) and thus brings about a longer service life of the dispersion of the innermost phase (I).~~
- 20 3. Formulation according to Claim 1 ~~or 2~~, ~~characterized in that~~wherein a plurality of biologically effective active ingredients in the various phases are combined in varying concentrations and with a release rate which is controlled in each case in a single formulation.
- 25 4. Formulation according to ~~one of~~ Claims 1 ~~to 3~~, ~~characterized in that~~wherein the formulation limits the release of the active ingredient from the innermost phase by choosing a suitable solvent for the outer phase.
- 30 5. Formulation according to ~~one of~~ Claims 1 ~~to 4~~, ~~characterized in that~~wherein the barrier mantle in the various phases is a microcapsule.

6. Formulation according to Claim 5, ~~characterized in that~~wherein the microcapsule of the barrier mantle is based on a polymer.
7. Formulation according to ~~one of Claims 1 to 6, characterized in that~~wherein
5 the outer third phase is an oil phase, ~~preferably of silicone oil or castor oil.~~
8. Formulation according to ~~one of Claims 1 to 7, characterized in that~~wherein the inner second phase is based on gelatin.
- 10 9. ~~Use of the~~A method for the controlled release of an active ingredient in a patient comprising administering to said patient a
formulation according to
~~one of Claims 1 to 8 for the controlled delayed release of active ingredients.~~